

January 30, 2019

CERTIFIED MAIL: 7018 0680 0000 1036 0369
RETURN RECEIPT REQUESTED

Chief, Air and TRI Section Enforcement Division U.S. Environmental Protection Agency Region 9 75 Hawthorne Street San Francisco, California 94105

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Director, Air Enforcement Division Office of Civil Enforcement U.S. EPA Headquarters, MC 2242A 1200 Pennsylvania Avenue, NW Washington, D.C. 20460

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RETURN RECEIPT REQUESTED

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611

Re: DOJ No. 90-5-2-1-10459

Re: United States v. Asarco

Consent Decree No. CV-15-02206-PHX-DLR Quarterly Report for the Fourth Quarter of 2018

Presented below is Asarco's quarterly report for the fourth quarter of 2018, as required by paragraphs 55 and B.36 of the above-referenced consent decree. Consent Decree reporting requirements are in bold italics followed by the required report information.

Paragraph 55.a.i: Emissions and monitoring data and corrective action records, including the following:

(1) The results of any performance tests that were required by the Consent Decree;

Smelter Method 5 Performance Tests:

Method 5 performance testing was conducted during the month of September 2018, and the results are enclosed in the pdf titled "2018 Smelter Testing Results".

Smelter Method 5B Performance Tests:

Method 5B performance testing was conducted at the acid plant during the month of September 2018, and the results are enclosed in the pdf titled "2018 Smelter Test Results".

Concentrator Method 5 Performance Tests:

Method 5 testing for the 10 scrubbers at the concentrator was conducted in November 2018 and the results are enclosed in the pdf titled "2018 Concentrator Testing Results".

Flash Furnace, Converter, and Anode Buildings Opacity Performance Tests:

The due date for the submittal of a performance test plan per 40 C.F.R. § 63.1450(c) is 60 days after the completion of the converter retrofit project (CRP). The CRP was completed on November 30, 2018 and the initial converter aisle opacity performance test protocol was submitted to EPA for approval on December 18, 2018.

- (2) Copies of any Visible Emissions evaluations or records for which opacity was 4 percent or greater for the building housing the flash furnace, converters, and anode furnaces (to include date, time, and duration of the opacity);
- (3) A description of any corrective actions taken to address the opacity from the building housing the flash furnace, converters, and anode furnaces (to include the date and time such actions were commenced and completed), along with a description of the cause of the opacity;

Exceedance(s) of 4% opacity limit applicable to visible emissions from the flash furnace, anode furnaces, and converter and not yet superseded by requirements related to the installation of the long-path optical density monitors:

N/A. Dependent upon CRP completion and initial fugitive emissions study.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and initial fugitive emissions study.

- (4) Dates, times, and duration of each bag leak detection system alarm sounding, the cause of the alarm and the date and time that ASARCO commenced investigation of the baghouse, and a description of the corrective actions taken, if any, along with the date and time such corrective actions were completed;
- (5) The total alarm time for each bag leak detection system, as determined in accordance with subparagraph 26.a.v;

Total alarm time for each bag leak detection system:

The secondary hood baghouse the following alarm during the fourth quarter of 2018.

Date	Time of Alarm	Total Duration of	Module Number
		Alarm (hours)	
10/14/2018	1:55 - 2:06	0.18	3

The anode baghouse had no alarms during the fourth quarter of 2018.

The furnace vent baghouse had no alarms during the fourth quarter of 2018.

Exceedance(s) of alarm limit of no more than 5% of total operating time in any 6-month period:

Secondary Hood Baghouse: October 1, 2018 – December 2018	er 31,
Total duration of bag leak detection system alarm hours	0.7
Total hours of source operation	3984
Percent of time in alarm (operating hours)	0.013%

Anode Baghouse: October 1, 2018 – December 31, 2018	
Total duration of bag leak detection system alarm hours	0.00
Total hours of source operation	
Percent of time in alarm (operating hours)	0.00%

Furnace Vent Baghouse: October 1, 2018 – December 31	, 2018
Total duration of bag leak detection system alarm hours	0.00
Total hours of source operation	
Percent of time in alarm (operating hours)	0.00%

Note: The Hayden Smelter was down from October 22, 2018 through October 25, 2018 and December 6, 2018 through December 20, 2018 for unexpected maintenance activities. No processing equipment was operating during any of these time periods.

Investigation(s), cause(s) and corrective action(s) taken:

On October 15th and 17th the baghouse maintenance crew thoroughly inspected the secondary hood baghouse's module No. 3 for any torn bags after the bag leak detection alarm. This crew does not work on the weekend (the alarm occurred on a Sunday). The inspection occurred on the day on which the crew worked. The maintenance crew did not find any bags that were in need of replacement during the inspection, and only noted that there were signs of moisture inside the baghouse from recent rain events. No corrective actions were necessary.

(6) Dates, times, and duration of any instances where pressure drop or scrubber liquid flow rates were outside the established ranges for those parameters, the date and time that ASARCO initiated investigation, the readings at the time of the issue, a description of the underlying cause for those readings, and a description and explanation of any corrective actions, including the date and time that such actions were commenced and completed;

Hourly (block) average pressure drop(s) and liquid flow rate(s) outside range established in most recent Method 5 test:

The hourly block averages outside the established range(s) are detailed in the enclosed compact disk.

Investigation(s), cause(s) and corrective action(s) taken:

The investigation(s), cause(s) and corrective action(s) taken for each event are detailed in the enclosed compact disk.

Times scrubber(s) not in service or believed to be malfunctioning:

The times that the scrubber(s) were not in service or believed to be malfunctioning are detailed in the enclosed compact disk.

(7) Dates, times, and descriptions of deviations from the gas capture parametric monitoring requirements and/or limits of Paragraph 9;

PRIMARY HOODING PARAMETER:

<u>Failure(s)</u> to achieve minimum air infiltration ratio of 1:1 during blowing when improved hood is operational averaged over 24 blowing hours rolled hourly:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

SECONDARY HOODING PARAMETER DURING BLOWING:

Failure(s) to achieve minimum exhaust rate of 35,000 SCFM at a converter averaged over 24 blowing hours rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

SECONDARY HOODING PARAMETER DURING NON-BLOWING:

Failure(s) to achieve minimum exhaust rate of 133,000 SCFM at a converter averaged over 24 non-blowing hours rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

SECONDARY HOODING PARAMETER WHEN HOOD DOORS ARE CLOSED:

<u>Failure(s)</u> to achieve minimum negative pressure drop across a hood of 0.03 mm of Hg (0.007 inches of water), unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

TERTIARY HOODING PARAMETER AT ALL TIMES MATERIAL IS PROCESSED IN COPPER CONVERTER DEPARTMENT:

Failure(s) to achieve minimum exhaust rate of 400,000 ACFM averaged over 24 hours of copper converter department material processing rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion and default parameter compliance date is December 1, 2019.

(8) Dates, times, and descriptions of deviations when ASARCO operated the furnaces, capture systems, baghouses, R&R Cottrell, or any other equipment in a manner inconsistent with the approved Operations and Maintenance Plan;

N/A. On March 20, 2018 Asarco received comments from EPA regarding the April 10, 2017 submitted Operation and Maintenance Plans. Asarco submitted the revised Operation and Maintenance Plans according the submittal schedule that Asarco and EPA agreed upon on May 3, 2018. The first submittal package was sent to EPA on May 4, 2018, the second submittal package was sent to EPA on June 1, 2018, and the last submittal package was sent to EPA on June 29, 2018. On October 18, 2018 EPA notified Asarco that it was disapproving the submitted

O&M Plans. Asarco has requested a meeting to discuss this disapproval with EPA but that meeting has not yet been scheduled.

(9) Dates, times, and descriptions of deviations when ASARCO's material handling was carried out in a manner inconsistent with the approved Operations and Maintenance Plan and/or Fugitive Dust Plan;

OPERATION AND MAINTENANCE PLAN

On March 20, 2018 Asarco received comments from EPA regarding the April 10, 2017 submitted Operation and Maintenance Plans. Asarco submitted the revised Operation and Maintenance Plans according the submittal schedule that Asarco and EPA agreed upon on May 3, 2018. The first submittal package was sent to EPA on May 4, 2018, the second submittal package was sent to EPA on June 1, 2018, and the last submittal package was sent to EPA on June 29, 2018. On October 18, 2018 Asarco received a notice of disapproval of the previously submitted O&M Plans from EPA. Asarco has requested a meeting to discuss this disapproval with EPA but that meeting has not yet been scheduled.

FUGITIVE DUST CONTROL PLAN

AJAX, Ltd. (AJAX) was selected to carry out the inactive facilities site and borrow material characterization and final site engineering for the Soil and Vegetative Cover Plans as specified in the approved Inactive Facilities Closure and Vegetation Plan. During the month of May 2018 samples were taken in each inactive facility and potential borrow material areas to better characterize the material present and inform the engineering designs. Once the lab results were received preliminary engineering began. In June initial plans to close the 82 Dam on the smelter lined impoundment were discussed with Arizona Department of Water Resources (ADWR) to incorporate their requirements for this facility in the final closure design plans.

Asarco and AJAX had several meetings to review and discuss the engineering designs and Soil and Vegetation Cover Plans for each of the three inactive facilities during the third quarter of 2018. Asarco submitted the Soil and Vegetation Cover Plans for the three inactive facilities to EPA on October 15, 2018. Two facilities are also facilities permitted under the Hayden Operation's Aquifer Protection Permit No. 100507 and those Soil Cover and Vegetation Plans were submitted to ADEQ for review on October 26, 2018.

<u>Deviation(s)</u> from material handling requirements of approved fugitive dust control plan and corrective action(s) taken:

See enclosed pdf titled "Fugitive Dust Plan Corrective Action 4Q2018."

Exceedance(s) of 15% Method 9 opacity limit on visible emissions from any source listed in the approved fugitive dust control plan (i.e., sources other than the furnaces and converter building) and corrective action(s) taken:

None during the fourth quarter of 2018.

Opacity readings outside major openings of secondary and tertiary crushers Total Enclosure or fine ore storage building in excess of minimum measurable opacity level over 6-minute period using long-path optical density monitors and corrective action(s) taken:

The open path opacity monitors were installed on August 10, 2018 at all four locations and the initial calibration was completed on August 14, 2018. On August 20, 2018 all four monitors were connected to the DCS. On August 20, 2018 instrument technicians checked the monitors located on both ends of the fine ore storage building as the monitors were not reading correctly due to alignment issues. Contractors were also in the process of adding bracing brackets to the instrument mounts to fix the alignment issues.

Since the mounting bracket was fixed, the opacity monitors located at the fine ore storage building were still not measuring correctly. In September it was realized that direct sunlight was interfering with the monitor's measurements at the fine ore buildings. A shade cover was later installed to remedy interferences with sunlight. After this modification the two monitors at the fine ore storage building were still coming out of alignment every day. After further investigation it was discovered that as the fine ore storage building's structure shifted throughout the day due to heat, vibration etc., the monitors would come out of alignment giving false readings. A new mounting system that would not be connected to the fine ore building was designed and the construction was bid out in November 2018. 5D Mining & Construction was chosen to carry out this project and a purchase order was generated on December 4, 2018. The project is expected to be completed in January 2019. Once the opacity monitors are re-installed on the new mounting system, Asarco will re-start the 120-day shakedown period for these monitors.

On December 11, 2018 Asarco submitted the notification to establish opacity monitor corrective action levels for the two monitors located at the secondary crusher building.

<u>Event(s)</u> when DCS system recorded data outside of established operational parameters, investigation(s), cause(s), corrective action(s), and degree of success:

<u>Water Spray Systems Operational Parameters</u>: The water spray systems' flow rate and pressure are recorded by the DCS.

<u>Camera Hill Meteorological Station Data & High Wind Events:</u> See Excel spreadsheet titled "High Wind Events 4Q2018" which is enclosed with this report on a compact disc.

<u>Acid Plant Scrubber Blowdown Solids Electric Dryer start/stop times</u>: Currently being recorded in the DCS per fugitive dust plan requirements.

<u>Concentrator Scrubber Parameters & Operational Run Times</u>: See enclosed scrubber alarm report for the fourth quarter of 2018.

<u>Refractory Brick Crusher Operational Parameters</u>: The refractory brick crusher did not operate during the fourth quarter of 2018.

<u>Dates and times when DCS system was not recording data:</u>

There were no recordings in the DCS for each water spray systems' pressure and flow rate prior to each connection/installation date noted in the pdf titled "Fugitive Dust Plan – 3Q2018 Update." Water spray system pressure and flow readings were recorded on the daily inspection forms prior to DCS connections for each system.

The open path opacity monitors were installed on August 10, 2018 at all four locations and the initial calibration was completed on August 14, 2018. On August 20, 2018 all four monitors were connected to the DCS. On August 20, 2018 instrument technicians checked the monitors located on both ends of the fine ore storage building as the monitors were not reading

correctly due to alignment issues. Contractors were also in the process of adding bracing brackets to the instrument mounts to fix the alignment issues.

Since the mounting bracket was fixed, the opacity monitors located at the fine ore storage building were still not measuring correctly. In September it was realized that direct sunlight was interfering with the monitor's measurements at the fine ore buildings. A shade cover was later installed to remedy interferences with sunlight. After this modification the two monitors at the fine ore storage building were still coming out of alignment every day. After further investigation it was discovered that as the fine ore storage building's structure shifted throughout the day due to heat, vibration etc., the monitors would come out of alignment giving false readings. A new mounting system that would not be connected to the fine ore building was designed and the construction was bid out in November 2018. 5D Mining & Construction was chosen to carry out this project and a purchase order was generated on December 4, 2018. The project is expected to be completed in January 2019.

AMBIENT MONITORING NETWORK

Ambient monitoring network raw data and calculated ambient levels for the fourth quarter of 2018 are enclosed with this report on a compact disc.

On December 12 and 19, 2018, Asarco submitted notifications of apparent exceedances of some trigger levels at several ambient stations. Asarco is in the process of investigating these events and will submit the corresponding 60-day reports to EPA as required.

(10) Dates, times, and descriptions (including emissions data) of any periods where ASARCO failed to meet an emission limit or an emissions control efficiency established under this Consent Decree;

ACID PLANT PM EMISSION LIMIT

Exceedance(s) of 6.2 mg/dscm limit as demonstrated through performance testing: None

SECONDARY HOOD BAGHOUSE EMISSION LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing and certified PM CEMS: None

ANODE FURNACE BAGHOUSE PM EMISSIONS LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing and certified PM CEMS: None

FURNACE VENT BAGHOUSE PM EMISSIONS LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing: None

COPPER CONCENTRATE DRYER PM EMISSIONS LIMIT

The copper concentrate dryer emissions are routed to the new furnace vent baghouse. See above section regarding the furnace vent baghouse PM Limit compliance.

FLASH FURNACE TAPPING/SKIMMING EMISSIONS CAPTURE SYSTEM PM EMISSIONS LIMIT

The flash furnace tapping/skimming emissions capture system is routed to the new furnace vent baghouse. See above section regarding the furnace vent baghouse PM Limit compliance.

PROCESS-WIDE TOTAL PM EMISSIONS LIMIT

The due date for beginning the use of a measuring system described in paragraph 24.a of the decree is June 1, 2019.

Exceedances of 0.6 lb PM per ton of concentrate smelted total PM limit(s):

N/A. Not applicable until December 1, 2019.

Investigation(s), causes(s) and corrective action(s) taken:

N/A. Not applicable until December 1, 2019.

DUCON-TYPE WET SCRUBBER OPERATIONAL REQUIREMENTS

Exceedance(s) of 0.05 g/dscm limit: None

DRY LIME SCRUBBING OF SO₂ ROUTED TO SECONDARY HOOD AND FURNACE VENT BAGHOUSES

Failure(s) to meet applicable control efficiency:

N/A. Dependent upon CRP completion and 365-days of operation.

<u>Investigation(s)</u>, cause(s) and corrective action(s) taken or status of demonstration of technical infeasibility of control efficiency:

N/A. Dependent upon CRP completion and 365-days of operation.

CORRECTIVE ACTION TRIGGERS FOR ACID PLANT

Date	Time of Trigger Level Alarm	Cause and Corrective Actions Taken if Necessary
12/19/2018	4:00 – 6:18	Acid plant pre-heater start-up prior to plant start up, corrective actions not necessary

SO₂ EMISSIONS LIMIT FOR GASES COLLECTED FROM THE CONVERTERS

Exceedance(s) of applicable 650 ppmv limit for gases routed to acid plant or secondary hood baghouse or gases in the tertiary hood exhaust:

No exceedances of the 650 ppmv limit on the acid plant tail gas, secondary hood baghouse or the tertiary ventilation system occurred during the fourth quarter of 2018.

Investigation(s), cause(s) and corrective action(s) taken:

N/A.

(11) Dates, times and descriptions where ASARCO exceeded the Blowing rate limit set forth in Paragraph 8 and/or, for such time as the Blowing hour limit in Paragraph 8.b remains applicable, the Blowing hour limit;

Exceedance(s) of converter blowing limit of 32,000 SCFM averaged over 5 minutes of blowing and rolled each minute:

Date	Time	Converter Number	Cause	
			None	

TOTAL COMBINED BLOWING TIME OR SO₂ LIMIT ON ACID PLANT TAIL GAS

Exceedance(s) of total combined blowing time limit at all converters of 21 hours per 24-hour period rolled hourly, unless Asarco accepts 100 ppmv SO₂ limit on acid plant tail gas:

None

Investigation(s), cause(s) and corrective action(s) taken:

N/A

ii. Status and/or completion of construction or compliance milestones;

CONVERTER RETROFIT PROJECT

The construction of converter #3's hooding, mouth burner, flux feed system and other ancillary equipment tie-ins was continued during the fourth quarter. The start-up of converter #3 occurred on November 30, 2018 and the CRP was completed. See also the PowerPoint presentation titled "Hayden CRP 4Q2018 Status" for additional information.

R&R COTTRELL ESP REPLACEMENT BAGHOUSE

Completed.

DRY LIME SCRUBBING OF SO₂ ROUTED TO BAGHOUSES

Completed.

PREPARATION OF FUGITIVE EMISSIONS STUDY PROTOCOL

Completed.

IMPLEMENTATION OF APPROVED FUGITIVE EMISSIONS STUDY PROTOCOL

Asarco began ordering the long-lead time equipment needed for the fugitive emissions study during the fourth quarter of 2018.

LONG-PATH OPTICAL DENSITY MONITORS SPECIFIED IN PROTOCOL

The due date for the installation of the three long-path optical density monitors at the building emission points specified in the fugitive emissions study protocol is 6 months after the completion of the initial fugitive emissions study.

iii. Status of PM CEMS installation and PS-11 testing pursuant to Paragraph 14;

On March 8, 2017 EPA approved of the March 3, 2017 revised Installation, Certification and QA/QC Protocol for the PM CEMS. From May 8-12, 2017, the initial PS11 correlation testing was performed on the anode baghouse PM CEMS and the testing report was submitted on July 18, 2017. The SICK light scatter PM CEM was successfully certified and the Altech beta attenuation PM CEM was not successfully certified. On September 6, 2017, a revised PS11 Certification testing protocol for the Altech beta attenuation PM CEM located at the anode baghouse was submitted to EPA for review and approval. A conference call was held on October 3, 2017 between Asarco, EPA, and Asarco's PM CEMS vendors to answer EPA's questions on the September 6, 2017 revised PS11 Certification Protocol. Additionally, the PS11 certification re-test for the Altech beta-attenuation monitor occurred during the week of October 30, 2017. The results of the Altech beta-attenuation monitor showed that it passed the second round of PS11 correlation testing and the report was submitted to EPA on January 22, 2018. Additionally, Asarco notified EPA in the report cover letter dated January 22, 2018, that the Altech beta-attenuation monitor would be relocated to the new furnace vent baghouse during the March 2018 plant wide outage. The Altech beta-attenuation monitor was successfully relocated to the outlet of the furnace ventilation baghouse.

The PM CEMS located at the secondary hood baghouse and the acid plant tail gas stream were installed during the month of August 2017. The initial PS11 correlation testing for these two PM CEMS occurred during the weeks of October 2 – 13, 2017. The SICK light scatter monitor located on the secondary hood baghouse passed the initial PS11 correlation testing and the acid plant Altech beta-attenuation monitor did not pass the initial PS11 correlation testing. The reports for these tests were submitted to EPA on January 22, 2018. On March 2, 2018 Asarco submitted a protocol for the re-test of the acid plant Altech beta-attenuation monitor to EPA to review and approve. On March 14, 2018 EPA sent comments on the protocol and Asarco incorporated those changes in a revised testing protocol that was submitted to EPA on March 22, 2018. On March 29, 2018 EPA approved of the March 22, 2018 revised Acid Plant re-test protocol. The PS11 certification re-test occurred from June 4-8, 2018. On August 28, 2018 Asarco submitted the PS11 re-test report to EPA and informed that the Acid Plant beta-attenuation PM CEM did not certify. On November 16, 2018, Asarco submitted the Alternative PM Monitoring Plan to EPA to utilize this monitor as a continuous parametric monitoring system (CPMS) and will submit to EPA for approval.

On March 16, 2018 Asarco submitted the new furnace vent baghouse and tertiary ventilation system's PM CEMS Installation, Certification, and QA/QC Protocol to EPA for review and approval. On March 22, 2018 EPA submitted its comments on the March 16, 2018 protocol and Asarco revised the protocol accordingly and submitted to EPA for approval on April 3, 2018. On April 6, 2018 EPA approved of the revised protocol. The initial PS11 correlation testing for the PM CEMS located on the tertiary ventilation system and furnace vent baghouse was conducted from July 9 – 20, 2018. Asarco submitted the results of the tertiary hood and furnace vent baghouse PS11 correlation testing to EPA on October 17, 2018. Additionally, Asarco notified EPA that it would be removing the beta attenuation PM CEM from the furnace vent baghouse on November 1, 2018 and keep the light scatter PM CEM at this location.

iv. Problems encountered or anticipated with Consent Decree compliance, together with implemented or proposed solutions;

None

v. Status of any permit applications pertaining to any of the requirements of this Consent Decree;

Completed.

vi. The status of the SEP under Section VIII and Appendix C including, at a minimum, a narrative description of activities undertaken; and

On March 13, 2018 an order was placed for the new diesel-electric switch locomotive. On May 31, 2018 the new diesel electric switch locomotive was delivered on-site. The old switch locomotive was scrapped and shipped off-site on December 26, 2018. The SEP is complete and Asarco is in the process of preparing the SEP Completion Report.

vii. The status of the Environmental Mitigation Projects under Section VII and Appendix A including, at a minimum, a narrative description of activities undertaken; status of Environmental Mitigation Project milestones set forth in Appendix A; and a summary of costs incurred since the previous report.

PINAL COUNTY ROAD PAVING ENVIRONMENTAL MITIGATION PROJECT

To date Asarco has submitted a total of \$6,000,000 to Pinal County for this project. As of June 30, 2018, the County has spent \$5,892,746.85 on the project.

The project was deemed complete by EPA on March 1, 2018 when EPA advised that the \$107,253.15 left over project money would be used for future maintenance of the newly paved Camino Rio Road. Asarco submitted the final project report to EPA on April 12, 2018 and EPA submitted comments on this report to Asarco on May 16, 2018. Asarco incorporated EPA's comments and submitted the revised project report to EPA on May 17, 2018. On June 7, 2018 EPA approved of the revised final project report.

LEAD-BASED PAINT ABATEMENT ENVIRONMENTAL MITIGATION PROJECT

On January 10, 2018 EPA approved of the December 14, 2017 version of the Lead Based Paint Abatement Project Plan. Asarco and CAG established a special escrow account with a bank for this project on April 19, 2018. The \$2 million project funds were transferred into the escrow account on April 20, 2018. CAG has withdrawn \$49,778.91 for the project as of December 31, 2018.

The contract with Adams & Wendt (A&W) was finalized in the third quarter of 2018 and the procurement process for abatement firms began as well. CAG continued to adverse to the Hayden and Winkelmann communities about the project to generate interest and start testing residences. In the fourth quarter of 2018 several houses and public buildings were tested for lead paint. Abatement work for positive results is not expected to begin until January 2019. See enclosed pdf document titled "Lead Paint Abatement Project Progress Report 4Q2018" for additional details.

55.b Description of any non-compliance with the requirements of this Consent Decree, including those identified in Paragraph 55.a.i and an explanation of the violation's likely cause and the remedial steps taken, to be taken, to prevent or minimize such violation.

There are Fugitive Dust Plan inspection forms for the 4th quarter of 2018 missing. All missing forms, explanation of the likely causes, and remedial steps taken are noted on the attached document titled "Fugitive Dust Plan Corrective Action 4Q2018".

PARAGRAPH 58. REPORT CERTIFICATION

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Joseph A. Wilhelm General Manager Hayden Operations

JAW/rcg

Enclosure